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ABSTRACT

This fourth report in the Southern Regional Education Board's series on middle-grades education recommends a number of actions that states, districts, and schools can take to improve middle-school student performance. These recommendations address lagging achievement, a lack of focus on academics, unprepared teachers, and a need for leadership and sufficient resources allocated where they can do the most good. The report calls for states to review their standards and expectations to determine whether they are rigorous and challenging and to clarify what students should master. The text criticizes states for concentrating their efforts on the "bookends" of schooling: early childhood and higher graduation rates. It asks states to provide examples of challenging curricula and to furnish information that schools, communities, and families can use to improve middle-grades education. It recommends a comprehensive framework with 10 critical elements that can help districts and schools move the middle grades forward. These elements include an academic core that is aligned with rigorous content and performance standards, a belief that all students matter, classroom practices that actively engage students in their learning, qualified teachers, and strong leadership. These actions can reverse the trend of eighth-grade students entering high school ill prepared. (RJM)

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Leading the Way: State Actions to Improve Student Achievement in the Middle Grades

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2

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Recommendations

Actions states and districts should take to improve student achievement in the middle grades

1. States should review content standards in grades five through eight to ensure that they clearly and completely spell out the essential content knowledge, skills and applications to be achieved at each grade level. Content and performance standards must state precisely what is expected so that students, families and teachers understand the criteria for promotion and success at the next level.

2. States should examine the level of performance required at the end of eighth grade and compare it with the standard for "proficient" performance on the National Assessment of Educational Progress to ensure that all students enter high school ready to succeed in curricula that prepare them for further learning and the workplace.

3. States should provide useful examples and a framework for core curricula that will be challenging and will meet state standards for content and student performance.

4. States should align assessments to content standards and define performance levels needed at the end of eighth grade to place students on a path that will meet graduation requirements in high school.

5. States should report the percentages of students who meet performance levels in a way that informs districts and schools about which indicators of readiness are best and which teaching practices improve eighth-graders' academic achievement.

6. States should require a teaching license specific to the middle grades with a content major or a content minor (or its equivalent) that includes upper-level college courses. The license should be linked to state standards for learning.

7. Middle grades licensure should require classroom experiences in schools with students in grades five through eight.

8. Districts and schools should employ only teachers who have at least the equivalent of a content minor in the subject or subjects they are to teach and who have school experience with young adolescents.

9. States should enact a policy that requires all teachers in the middle grades to obtain a content minor or its equivalent in the subject or subjects they teach within five years in order to renew their licenses.

10. Districts and schools should provide professional development that is linked to student performance on state and local standards and is directed toward improving content knowledge and teaching practices.

11. States should outline clearly a vision of comprehensive improvement in the middle grades that will increase the percentages of students who perform at state standards.

12. State departments of education should assign personnel to be responsible for efforts to improve student achievement in the middle grades.

13. States should examine the level of resources available for middle grades education to ensure that academic gains made in the early grades are sustained in grades five through eight.

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Sondra Cooney is director of the Southern Regional Education Board's Middle Grades Education Initiative. This is the fourth in a series of reports funded by a grant from the Edna McConnell Clark Foundation.

Imagine that a network news crew is traveling from state to state in the SREB region and asking education policy-makers these questions:

"What do you expect in your middle grades? What should your students know and be able to do at the end of eighth grade?"

What would the answers be?

Have our states clearly defined an academic purpose for the middle grades? Are they something more than a way station between elementary school and high school? Do state and local leaders share clear expectations about the skills and knowledge each student should possess as he or she makes the difficult transition into high school?

And if a common vision for the middle grades *does* exist, is it embodied in each state's policies regarding curricula and assessment? Do those policies mirror the academic expectations laid out in the high-stakes accountability systems that SREB states have adopted?

In a series of reports, the Southern Regional Education Board has identified problems that help explain the pattern of lagging performance among middle grades students in the region's 16 states. This final report offers a framework for policies and actions that can alter that discouraging pattern — a pattern that, if not mended, will stymie the considerable efforts states are making to reform the public schools.

While state and local education decision-makers may not yet share a common vision of the ideal program for the middle grades, this report assumes that they do agree on these general principles, around which coherent, sharply focused policies can be shaped:

- All middle grades students should master an accelerated academic core that fully prepares them for challenging studies in high school.
- The unique developmental needs of adolescents justify special training for teachers and special services in the middle grades, but they are no excuse for the lack of attention to a rigorous academic program for all students.

- Poorly focused academic programs — not socio-economic, racial or ethnic differences — appear to be the primary reason for the lagging performance of middle grades students, especially considering the higher achievement of students in elementary school.
- Performance standards for middle grades schools should be rooted in our expectations for what entering ninth-graders should know and be able to do in order to be ready for challenging work in high school.
- Before we can close the "achievement gap" in the middle grades, we must have policies to ensure that teachers are well-prepared to help all students in the middle grades learn at high levels.

The predicament

More than half of eighth-graders in SREB states are below the basic level in mathematics as defined by the National Assessment of Educational Progress. Fewer than 20 percent meet the NAEP "proficient" standard. Too many students enter high school unprepared for the tougher graduation requirements that many states have enacted. These students have little chance of meeting high academic standards or of being fully prepared for postsecondary education or promising employment.

How did we get into this predicament? First and foremost, high-level learning for all students is a low priority in many middle grades schools. There is little agreement about what we should teach in the middle grades, when we should teach it, and how high we should set academic standards. Couple this lack of focus with an assessment process that does not measure student progress against predictors of success in high school — or relies on broad, ambiguous "standards" that offer teachers no clear direction — and you have a recipe for lagging achievement.

But a lack of focus and rigor are not the only ingredients in the middle grades that need re-examination. Simply demanding more of students will not produce leaps in achievement. There are not enough teachers in the middle grades who are ready to teach more rigorous curricula to higher standards. Too many teachers lack sufficient knowledge either of the content of the subjects they teach or of the teaching practices that help young adolescents learn more.

Middle grades schools also have a resource problem. To their credit, state policy-makers have invested in early childhood education, reading programs and more demanding requirements for graduation. Although these "bookend" investments are important, they have done little to fortify the bridge between elementary school and high school. The flat or declining performance of eighth-graders in the region is a result of this inattention to the middle grades. States clearly need to include middle grades education on the list of budget priorities.

A comprehensive policy statement for the middle grades might read something like this: "All students in the middle grades will learn a rigorous academic core with highly qualified teachers who engage their interests through relevant, hands-on materials and activities, and all students will leave eighth grade ready for success in high school." State and local policy-makers will determine whether this vision is a pipe dream or a probability.

To move the middle grades forward, state policy-makers must craft a clear, measurable goal for middle grades education. Such a goal statement then must be accompanied by actions that help districts and schools change what is taught, what is expected, *how* students are taught, and how families participate. States can promote these changes by providing more resources that support the goal and by providing better information on how students perform and why they succeed or fail.

Setting standards and expectations

SREB states are unlikely to see significant increases in the percentages of students who score at the basic and proficient levels on the National Assessment of Educational Progress until state policies become clearer about what students are to be taught and at what level they are expected to perform. States can take several actions to achieve clear, measurable goals for the middle grades.

States should review content standards in grades five through eight to ensure that they clearly and completely spell out the essential content knowledge, skills and applications to be achieved at each grade level. Content and performance standards must state precisely what is expected so that students, families and teachers understand the criteria for promotion and success at the next level.

Fifteen of the 16 SREB states have content standards in four core academic areas, and South Carolina has content standards in three of four core areas. Nine states organize their content standards by grade level, while seven states organize them by grade clusters (such as kindergarten through grade four, grades five through eight, and grades nine through 12).

Several groups have reviewed state standards for their clarity, rigor, organization and other qualities. Education Week magazine used criteria developed by the American Federation of Teachers and reported that four SREB states had English standards in the middle grades that were clear and concise; five states had clear standards in social studies. The numbers with clear mathematics and science standards in the middle grades were better: 12 and 13, respectively.

The Council for Basic Education judged states' mathematics and English/language arts standards on their rigor. The council found that no SREB state had "very rigorous standards" (grades of A to B+) in English/language arts, and six SREB states were assigned grades of C- to D-. The council concluded that, overall, mathematics standards were more rigorous and assigned an A or B+ to three SREB states. No SREB state received a grade below C+ in mathematics.

States should review content standards in grades five through eight to ensure that they clearly and completely spell out the essential content knowledge, skills and applications to be achieved at each grade level. Content and performance standards must state precisely what is expected so that students, families and teachers understand the criteria for promotion and success at the next level.

States should examine the level of performance required at the end of eighth grade and compare it with the standard for "proficient" performance on the National Assessment of Educational Progress to ensure that all students enter high school ready to succeed in curricula that prepare them for further learning and the workplace.

While these national surveys call attention to weak or unclear standards, states should conduct their own studies of existing standards in the middle grades to ensure that they are meaningful and likely to drive much-needed changes in teaching and learning.

States should ask themselves, "Will all students who meet existing state standards be able to do challenging work in grade nine?"

In 1995, SREB President Mark Musick challenged member states to examine the rigor of their content and performance standards. He said standards were too low because states appeared to be setting standards based on what students are currently achieving rather than on what students should be learning. He suggested that states should be measuring students' performance against the proficiency standards outlined by the National Assessment of Educational Progress.

SREB states have reviewed their performance standards since 1995, and several have revised content standards as well. Maryland and North Carolina have compared assessment results on the state standards with the National Assessment of Educational Progress scales in an effort to provide reliable benchmarks for student performance.

Most states have not translated state standards into district curricula and classroom practices that result in improved student achievement. Districts usually are responsible for developing and implementing curricula in classrooms. *Districts and schools must deliver challenging curricula aligned with state standards and focused on clear, measurable expectations for all students.* In order to clarify the standards, states and districts can provide teachers, students and parents with examples of high-quality work that meets expectations.

States should provide useful examples and a framework for core curricula that will be challenging and will meet state standards for content and student performance.

What should be taught in a challenging academic core for grades five through eight? Five statements define the critical elements in curricula that prepare middle grades students for success in further learning.

Challenging core curricula

While districts and schools retain final control over the exact content of middle grades curricula, state policy-makers can describe expectations by providing examples of core curricula in mathematics, science, reading, language arts and social studies.

The **mathematics** curriculum should provide opportunities and materials for mastery of the knowledge and skills needed to apply arithmetic, algebra and geometry concepts and to demonstrate mathematical reasoning through solving problems with multiple steps. Middle grades students who complete the curriculum for grades five through eight should have earned credit for Algebra I or should have demonstrated proficiency in pre-algebra and a readiness for Algebra I in high school.

Critical Elements of Core Curricula for the Middle Grades

- In **mathematics,** all students either complete Algebra I with acceptable performance or pass a pre-algebra test of proficiency. Students also must be able to apply mathematical concepts and to use mathematical reasoning to solve problems with multiple steps.
- In **science,** the curriculum provides laboratory and technology experiences to apply the concepts in physical, life and earth/space sciences that all students should learn in the middle grades.
- **Reading** instruction across content areas is part of the academic core through eighth grade. There should be intensive reading courses for students who are significantly below grade-level standards.
- In **language arts,** eighth-graders must demonstrate that they have a well-developed vocabulary with proper grammar and spelling and can use these skills to find, organize and report on information through reading, writing, speaking and listening before entering high school.
- In **social studies,** eighth-graders should describe their heritage, their government, their world and economic principles through their knowledge of the past and of key issues in the present and future.

Middle grades students have great difficulty both in computing and in solving problems that require more than one step.

- Two out of three Georgia students in grades seven through 10 who were given a preliminary version of the Scholastic Achievement Test could not convert a number in decimal form into a percentage. Based on scores from NAEP, there is no reason to believe that Georgia's experience is significantly different from many other states in the region.
- Eighth-grade girls in SREB states perform significantly below girls nationwide in each of the five content strands for mathematics that are measured by the National Assessment of Educational Progress.
- In 1996, 25 percent of eighth-graders in SREB states completed Algebra I and 34 percent completed pre-algebra. Forty percent of students entering ninth grade had no plans to study Algebra I, even though all SREB states require that course for graduation.
- Only 15 percent of eighth-grade students in SREB states report using mathematical tools such as scientific graphing calculators. These students perform as well as or better than similar students nationwide on the National Assessment of Educational Progress.

A rigorous **science** curriculum in the middle grades requires mastery of the scientific process and an ability to apply concepts in physical, life and earth/space sciences in laboratory settings. Too many students in the middle grades now study science only through a textbook. In fact, nearly 40 percent of eighth-graders in SREB states say science consists mostly of memorization. Middle grades students must have access to technology and to well-equipped laboratories that make science real to them.

- Eighth-graders in SREB states do less hands-on work in a science laboratory than do eighth-graders nationwide. Nearly 10 percent of eighth-graders in the region report that they never have done a science experiment.
- Eighth-grade science teachers in SREB states are more likely than their national counterparts to report having insufficient instructional materials and other resources needed to teach science. In the SREB region, 30 percent said they need more science resources, compared with 20 percent of eighth-grade teachers nationwide.
- Eighth-graders — boys and girls alike — in SREB states have lower average scores in physical, life and earth sciences than eighth-graders nationwide.

Reading instruction in the middle grades is often hit or miss. If the middle grades teacher is elementary-certified, he or she has had one or more reading courses, but most often the required courses are geared to teaching beginning readers in kindergarten through grade three. Most secondary-certified teachers are not required to take a course on how to teach reading. Thus specific reading instruction essentially ends at grade four or five and then reading becomes part of a language arts curriculum. Because of the importance of reading, and because many students in the middle grades have not developed the skills and fluency needed for further learning, older students

need help in learning how to read materials in different content areas. This help requires specialized training for teachers. *Before many middle grades students can achieve core academic skills and concepts, they must receive reading instruction, and all students must practice key reading processes and comprehension skills in all content areas.*

A rigorous **language-arts** curriculum ensures that all students can use standard English correctly and effectively. The language arts curriculum in the middle grades should provide experiences for students to practice skills in reading, writing, speaking, listening and researching across all content areas (not just fiction and creative writing). It also should help them develop skills in understanding and working with the challenging academic texts they will encounter in the middle grades, high school and beyond. Students should be required to use demanding vocabulary, proper grammar and proper spelling in completing products such as a literature analysis, an oral report, a multimedia presentation, a research paper, and a portfolio of writing. The language arts curriculum supports student learning in all subjects and should be integrated with all standards of learning.

A challenging **social-studies** curriculum requires a systematic study of content, skills and concepts and of how they apply to key issues and relationships in the past, present and future. Social studies in the middle grades consists of many different subjects and consequently is often unfocused. We rely on social studies to help students understand the principles of American democracy, the workings of American society, and our relationship with different peoples and cultures worldwide. To overcome a scattershot approach, middle grades students need a systematic scope and sequence of content, skills and concepts in history, civics/government, geography and economics to explore key issues in the past, present and future.

States can provide direct support for the academic core curricula. Some states produce curriculum guides with examples of lessons and units that demonstrate what is to be taught to achieve the state standards. Districts can use such guides to align their curricula with the state standards. Other states do not directly provide curricular materials but screen materials developed nationwide for evidence that the curricula result in improved student achievement.

But having rigorous, clear content standards and useful frameworks for curricula is not enough to improve the middle grades. State assessments and performance standards must be aligned with content standards for accountability efforts to be effective.

States should align assessments to content standards and define performance levels needed at the end of eighth grade to place students on a path that will meet graduation requirements in high school.

Assessment and accountability

To ensure that all middle grades students are ready for success in further learning, students should be assessed at the end of eighth grade before they go on to high school. Some states have not aligned their state assessments with that logical transition point and cannot ensure that all ninth-graders will be prepared for high school. Some states have shifted assessments in selected content areas to sixth or seventh grade in an attempt to increase accountability for teachers in those grades. While such accountability is important, states should consider alternate methods that do not interfere with the need to assess each exiting eighth-grader's readiness for high school.

States can support the academic core curricula by using assessment results to inform districts and schools about which practices help students meet expectations and which do not. This assistance requires more information than a test score can provide and means that states will have to develop a broader range of assessment data.

States can begin this process by asking, "What indicators will tell us whether students are ready for challenging work in high school?" And then, "In middle schools that are producing students who meet these readiness indicators, what practices appear to be improving their performance?"

If states and districts can determine which practices improve performance, they will be in a better position to end the "blame cycle" that allows low-performing schools to attribute their failure to poverty, race and other factors beyond their control.

Once indicators of readiness are in place, data from students' ninth-grade performance can be compiled and shared regularly with "feeder" middle schools. This detailed information is vital to curricular and instructional reform in the middle grades.

Regional data indicate that the highest percentages of dropouts and retentions occur during the ninth-grade year. Dropout and failure rates should begin to decline if eighth-grade assessment is aligned with content and performance standards necessary for high school work. For instance, *if eighth-graders pass a pre-algebra proficiency test, but the percentage of ninth-graders who fail algebra does not decrease, then what is taught and how it is taught must be examined at both the eighth- and ninth-grade levels.*

Many districts do not have the research capacity to analyze data and to identify successful practices that incorporate standards for content and performance. State education agencies that have staff devoted to the middle grades can help local districts develop challenging, rigorous content standards and curricula in the core academic areas as well as valid indicators of readiness for high

States should report the percentages of students who meet performance levels in a way that informs districts and schools about which indicators of readiness are best and which teaching practices improve eighth-graders' academic achievement.

school. In *Raising the Bar in the Middle Grades: Readiness for Success,* SREB gathered data and perceptions on a set of indicators identified in research nationwide. SREB states and districts should begin to use their assessment and performance data to develop indicators specific to their needs and practices.

All SREB states report assessment results school by school. But the results do not necessarily indicate what the school and teachers need to do differently to achieve better results. The assessment process and results should link student performance to student experiences and teaching practices in order to help districts and schools decide what they must to do to improve student performance.

Districts play a major role in helping schools and teachers use state and local assessment data to address student needs. Qualified staff members in district offices can help schools make assessment results understandable for teachers, parents and the community, and they can help administrators and teachers use the results to identify areas that need further study. To ensure a more accurate profile of student progress, these staff members also can suggest using additional assessment tools (such as samples of student work) that align with the curricula and with instructional strategies. Districts must provide leadership by emphasizing the need for continuous assessment of students and teachers and by supporting schools in gathering, analyzing and interpreting evidence of progress by students and schools.

States have large databases on school and student performance and should learn to use the data to help districts and schools improve. Most often, however, the data are used to identify low- and high-performing sites without more substantive information about curricula and teaching practices that might affect students' performance. State education agencies have access to research organizations and to national efforts in research and development. They can link schools and districts that have specific needs to the people, sites or organizations that have had success in addressing similar needs.

For instance, West Virginia holds a "best practices" conference each year to provide examples of research-based teaching practices in schools statewide. Texas and North Carolina have studied high-performing schools — including high-poverty schools that "beat the demographic indicators" — to identify effective practices that are common to all of those schools and districts.

If assessment and accountability are to be effective, more people must be aware of what is important and what needs to be done, and more and more must be involved in determining how to reach the important goals. Continuous improvement is driven by assessment data that describe what works and what does not. The data provide evidence that will help everyone — students, teachers, administrators and families — be accountable for content and performance standards.

States should require a teaching license specific to the middle grades with a content major or a content minor (or its equivalent) that includes upper-level college courses. The license should be linked to state standards for learning.

Middle grades licensure should require classroom experiences in schools with students in grades five through eight.

Improved teaching in the middle grades

Higher standards and more accountability by themselves cannot move the middle grades forward. Teachers cannot teach content that they have not learned. States can adopt rigorous content standards and assess them; districts and schools can develop challenging curricula and require teaching practices that research has proven to be effective. But if the teacher in the classroom does not understand the structure and content of mathematics, he or she will not be able to teach algebra so that all students can learn it.

To ensure that all students are held to high expectations, all teachers must be prepared to teach challenging content and young adolescents. If students are to meet standards, teachers must be prepared to teach the more advanced content that higher standards require. As SREB reported in *Improving Teaching in the Middle Grades: Higher Standards for Students Aren't Enough,* too many teachers in the middle grades lack adequate knowledge of content or of how young adolescents learn best. States can help to improve the quality of teachers by adding a license specific to grades five through eight and removing these grades from elementary and secondary licenses and by providing adequate resources for teacher preparation programs in state-supported colleges and universities. These programs should have the resources to provide pre-service teachers with additional school experiences in a variety of middle grades settings — schools large and small and in city, suburban and rural communities.

Colleges and universities that are leading improvement in teacher education form teams of faculty from arts and sciences and from education, and these teams outline what to teach and how to teach it effectively. These colleges and universities also require several experiences in schools to provide potential teachers with practice in working with students from many different backgrounds, in addressing the needs of at-risk students, and in engaging young adolescents in learning. College faculty team up with master teachers to turn middle grades classrooms into classrooms for teacher candidates as well. Teacher candidates who participate in these partnerships between schools and higher education have the opportunity to apply research-based practices in real classrooms with the guidance of master teachers. These hands-on experiences support their readiness for licensure and prepare them to be effective, full-time teachers in the classroom.

Districts and schools should employ only teachers who have at least the equivalent of a content minor in the subject or subjects they are to teach and who have school experience with young adolescents.

States should enact a policy that requires all teachers in the middle grades to obtain a content minor or its equivalent in the subject or subjects they teach within five years in order to renew their licenses.

Seven SREB states support teachers new to the field by linking them with master teachers who can help them with curricula, instruction and assessment. Because about half of all those who complete teacher preparation programs never become teachers and nearly half of those who do enter teaching leave within five years, such support is critical to encourage new teachers to remain in the profession.

If districts and schools are serious about raising student achievement, they must be willing to act on policies that support the goal. One district in South Carolina requires every teacher to have a content minor in the subject area or areas he or she is assigned to teach. The district compiled information on the number of teachers with at least a content minor by school and grade and then reported this information to the community. By paying the college tuition of teachers and funding professional development, members of the community supported teachers' efforts to gain new content knowledge. The district invested in human resources. Student achievement and parental support have improved in this district.

States can improve teaching by requiring that teachers' further study or professional development focus on the content area that matches the teaching assignment. If teachers need upper-level content courses for licensure renewal, states should provide funding for professional development that meets that need. Kentucky, Louisiana and Florida have sponsored summer institutes at colleges and universities for teachers in specific content areas — especially mathematics and science. By setting a deadline for license renewal — much as states set deadlines for teachers to earn bachelor's degrees in the 1950s and 1960s — state leaders can accelerate the improvement of teachers in the middle grades.

Data from national surveys show that middle grades teachers in SREB states are less likely than their counterparts nationwide to change their views on teaching or to seek further information or training as a result of professional development. These teachers describe professional development as it often exists in districts and schools today: unfocused and ineffective. Professional development should be linked to student performance and the real work of the classroom teacher. If students are not meeting standards for mathematics, professional development should focus on mathematics content and strategies proven to be effective for teaching mathematics.

Districts and schools should provide professional development that is linked to student performance on state and local standards and is directed toward improving content knowledge and teaching practices.

States, districts and schools have invested significantly in professional development without determining whether those investments have paid off in improved student achievement. This lack of accountability for results also has allowed the definition of "professional development" to remain murky. In many districts and schools, professional development is defined by a day or an event rather than an adult learning experience that changes teachers' behaviors or attitudes. By better defining professional development, states can help schools and districts shift their attention away from the *time spent* on professional development and toward its *effectiveness.* When schools begin to judge professional development from this perspective, they will recognize that any activities that improve teacher practice — including seminars and study groups that examine the rigor of the curricula — may meet the definition of good "in-service training."

National Assessment of Educational Progress data from SREB states indicate that professional development in mathematics must be intense enough and long enough — at least 16 hours — to make a difference in student performance. It also must focus on mathematics *content* as opposed to more general topics, such as methods for teaching mathematics. Similarly, according to NAEP science data from SREB states, only science teachers who attended a summer institute that lasted at least a week had students who performed as well as eighth-graders nationwide.

Schools must use data on student performance to determine what professional development is needed. Those needs will vary from school to school; districts should plan professional development that meets needs common to all schools as well as addresses teaching and learning issues identified by individual schools. States can provide professional development linked to state standards and can identify effective professional-development providers and models.

Leadership for the middle grades

The condition of the middle grades — lagging achievement; a lack of focus; an absence of clear, measurable statements of what is to be taught and learned; a scarcity of resources compared with support for other grade levels — demonstrates a lack of leadership for middle grades education. States, districts and schools must provide leadership through policies and actions in the middle grades in order to accomplish the goal of proficiency for all students.

The improvement framework for the middle grades begins with an examination of the total program. A quality program includes a challenging core supported by more comprehensive curricula for the middle grades that include help and opportunities for students to explore how academic content and skills are used in real-life work. Every student should have an adult mentor or adviser who, along with the student's family, guides the development of a personal learning plan.

States should outline clearly a vision of comprehensive improvement in the middle grades that will increase the percentages of students who perform at state standards.

A Comprehensive Framework

A comprehensive framework for improving the middle grades is based upon several factors:

- **An academic core that is aligned with rigorous content and performance standards** — All students in the middle grades must have academic core curricula that accelerate their learning, challenge them and appeal to their interests.
- **A belief that all students matter** — Each student needs to have a personal relationship with an adult mentor or adviser who takes an interest in his or her success and sets high expectations for learning and personal growth.
- **A system of extra help and time** — Students learn in different ways and at different rates. They need enough time and help to meet more rigorous, consistent standards for all eighth-graders.
- **Classroom practices that actively engage students in their learning** — Hands-on activities are a key to keeping students in the middle grades focused on learning.
- **Teachers working together** — Teachers need support from one another to develop opportunities for students to learn more, and they need to share student work that meets proficiency standards.
- **Support from parents** — Parents must have a clear understanding of and must support the higher standards for performance in the middle grades.
- **Qualified teachers** — Middle grades teachers must know both academic content and how to teach young adolescents.
- **Use of data** — States, districts and schools must use data on student and school performance continuously to improve school and classroom practices and student achievement.
- **Technology** — Middle grades teachers must have or learn the skills needed to use technology in everyday teaching to improve student learning.
- **Strong leadership** — Middle grades schools need strong, effective principals who encourage teachers and actively participate with them in planning and delivering improvements in school and classroom practices.

In schools that report placing a priority on academic core subjects, eighth-grade student achievement is higher and eighth-graders in SREB states score as well as their counterparts nationwide. But that does not mean these schools ignore or eliminate fine arts, physical education, health education and second languages. These important parts of a total school program support core academics by meeting student interests and helping students develop a meaningful plan for further learning. These other subjects allow student to use various techniques and technologies that connect to academic learning.

Districts and schools must provide all students with opportunities to explore the arts — physical, fine and technical. The arts often help students understand and apply the essential concepts of the core curricula, and they can motivate students to continue learning and to plan for college and a career.

States, districts and schools that work together to develop a common vision and an improvement framework will get results, and their students will achieve much more in the middle grades. All middle grades schools should develop a multiyear plan based upon a comprehensive framework for improvement, and states should take actions to ensure that schools build upon the framework.

Too often, the middle grades are relegated to "distant cousin" status. States must rethink old assumptions that education reform will be accomplished simply by focusing on reading and computing in the elementary years and by increasing graduation requirements in high school. Few SREB states have personnel in the state education agency who work only with middle grades education. What might more leadership accomplish at the state level?

Two SREB states have statewide efforts to improve student achievement in the middle grades. Texas has a network of middle grades sites that help other sites improve by showing teachers, administrators and parents what can and should be done in the middle grades. According to the Texas accountability system, the network has resulted in improved achievement for all students in the middle grades. West Virginia has assigned staff to work with 38 middle grades sites to ensure that key practices to improve student achievement in the schools are aligned with what will be expected of the students when they enter high school.

Before they become middle grades principals, assistant principals in Texas receive professional development on leadership in improving student achievement. Kentucky has organized a state task force to underscore its commitment to raising performance in the middle grades.

If no one at the state level has direct responsibility for the middle grades, the state is unlikely to provide the assistance, the information or the materials that districts and schools need to jump-start the middle grades and to refocus on student achievement. Too often, the middle grades may have inadequate resources to educate young adolescents.

State departments of education should assign personnel to be responsible for efforts to improve student achievement in the middle grades.

States should examine the level of resources available for middle grades education to ensure that academic gains made in the early grades are sustained in grades five through eight.

A 1995 study of finance programs in public schools tracked four states' funding earmarked for "basic support" by grade levels. In each of the four states, the base funding was lowest in the middle grades, and the funding is the same or lower in than 1998-99. Supplementary funding from the federal government, such as Title I funds, also is directed most often to the elementary grades. If students in the middle grades are to achieve more rigorous standards, they need resources, such as well-equipped science laboratories and technological tools, that support deeper understanding. States and districts should allocate resources equitably to support the middle grades and to ensure that practices proven by research to be effective lead to an increase in the number of students who meet national, state and local standards and who are adequately prepared for further learning in high school and college.

One of the distinguishing characteristics of successful schools is the presence of stable leadership. Leadership is required at the district office, at the state education agency and at the school. Each level needs leadership to focus attention and develop a vision for what the middle grades should be, and the leaders at each level need to share that vision with parents, teachers, students and the community at-large.

Schools need leaders who can inspire cooperation and gain consensus on how to improve student performance. Middle grades principals should support higher standards, know how to use data on student achievement to improve schools, and understand which curricula are challenging and which teaching practices are effective.

Table 1

Funding Weights by Grade Level in Selected States, 1998-99

Grade Levels	Florida	Georgia	Oklahoma	South Carolina
K-2	1.057	1.3210 (K) 1.2424 (1-3)	1.3 (pre-K) 1.3 (K) 1.351 (1-2) 1.051 (3)	1.3 (K) 1.24 (1-3)
4-8	1.0	1.0067 (4-5) 1.0122 (6-8)	1.00 (4-6)	1.0 (4-8)
9-12	1.138	1.0	1.2 (7-12)	1.25 * 1.29

* State assigns extra weight to vocational education.

Source: State Surveys, May 1999

Districts need leaders who will insist that teachers have appropriate content backgrounds in the subjects they teach and who will inform the public about which teachers have content minors or majors in the subjects they teach. Districts also need personnel who are responsible for helping middle grades schools do what is necessary to achieve their goals for education.

A journey begins

The policies and actions outlined in this report can help states and schools begin the journey to real changes in middle grades education regionwide. *Ten years from now, all students in the middle grades in SREB states should perform at the basic level — and at least half of them should be at the proficient level — in all academic areas assessed by the National Assessment of Educational Progress.* By working and learning together, states can identify more quickly what makes a difference in middle grades achievement.

To begin the region's journey, each state must:

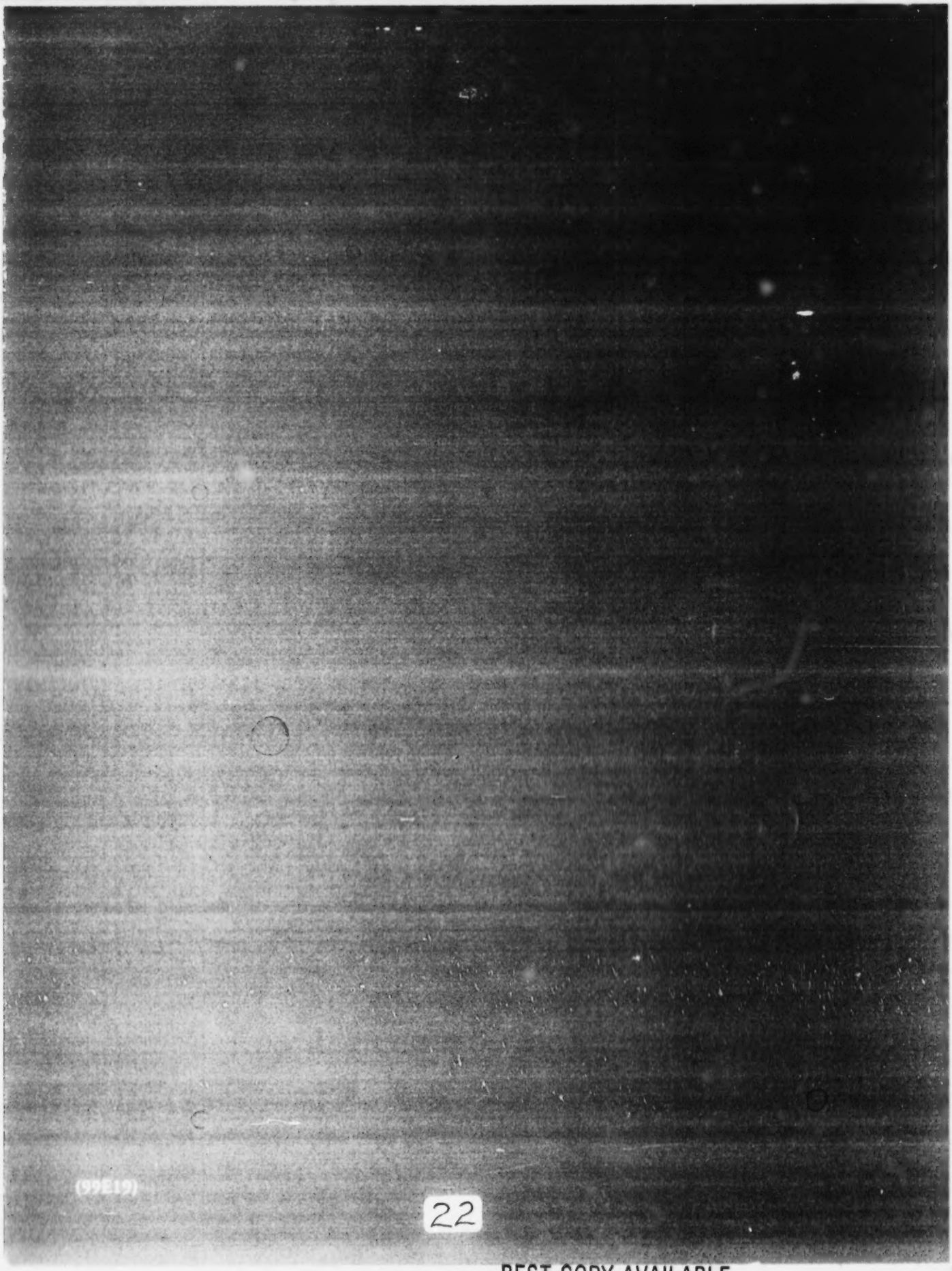
- set a clear goal and focus for middle grades education;
- plan specific actions the state can take to reach the goal;
- assess the goal in a way that explains what must be done differently to achieve the desired results; and
- support the goal with leadership and resources.

Through SREB and state leadership, there will be opportunities to work together toward a common vision, develop a coherent design, and implement a process to improve middle grades schools and student achievement. Most actions to improve the middle grades have been fragmented or piecemeal, depending upon the topic of the day, the packaged solution of the week, or the available funding source. By developing networks of districts and schools working together, SREB and leaders in its member states can forge a comprehensive approach to accelerating achievement in all middle grades schools. Now is the time for leadership and for action — the first steps in the journey to bring focus and improvement to middle grades education.

A Comprehensive Framework

A comprehensive framework for improving the middle grades is based upon several factors:

- *An academic core that is aligned with rigorous content and performance standards* — All students in the middle grades must have academic core curricula that accelerate their learning, challenge them and appeal to their interests.
- *A belief that all students matter* — Each student needs to have a personal relationship with an adult mentor or adviser who takes an interest in his or her success and sets high expectations for learning and personal growth.
- *A system of extra help and time* — Students learn in different ways and at different rates. They need enough time and help to meet more rigorous, consistent standards for all eighth-graders.
- *Classroom practices that actively engage students in their learning* — Hands-on activities are a key to keeping students in the middle grades focused on learning.
- *Teachers working together* — Teachers need support from one another to develop opportunities for students to learn more, and they need to share student work that meets proficiency standards.
- *Support from parents* — Parents must have a clear understanding of and must support the higher standards for performance in the middle grades.
- *Qualified teachers* — Middle grades teachers must know both academic content and how to teach young adolescents.
- *Use of data* — States, districts and schools must use data on student and school performance continuously to improve school and classroom practices and student achievement.
- *Technology* — Middle grades teachers must have or learn the skills needed to use technology in everyday teaching to improve student learning.
- *Strong leadership* — Middle grades schools need strong, effective principals who encourage teachers and actively participate with them in planning and delivering improvements in school and classroom practices.



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